Reply to Office Action of March 1, 2006

Date: June 1, 2006

Current Status of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (currently amended) A microscope stage assembly, which comprises a stage having a top side and a bottom side, an opening in said stage in the form of a linear slot, a carriage positioned adjacent to said slot for movement in a direction generally parallel with said slot, drive means for said carriage and said stage, specimen retaining means on the top side of said stage, and means for affixing said specimen retaining means to said carriage through said opening in said stage, wherein said stage is displaceable by said drive means along a y-axis, and said bearings and said drive means for said carriage and said stage are disposed under said stage and are shielded by said bottom side of said stage.
- 2. (withdrawn) The microscope stage assembly of Claim 1, wherein said carriage and specimen retaining means move laterally relative to said stage in an x-axis.
- 3. (currently amended) The microscope stage assembly of Claim 1, comprising a stage mounting plate for mounting said assembly to a microscope.
- 4. (cancelled)
- 5. (withdrawn) The microscope stage assembly of Claim 1, wherein said drive means for said carriage comprises a belt and pulley assembly, and a microscope stage drive mechanism for movement of said belt and pulley assembly.
- 6. (withdrawn) The microscope stage assembly of Claim 5, wherein said drive means for said carriage is positioned on the bottom side of said stage.

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7. (withdrawn) The microscope stage assembly of Claim 1, wherein said drive means for

said carriage comprises a drive mechanism suitable for detachably securing to said stage at more

than one location.

8. (currently amended) The microscope stage assembly of Claim 1, comprising a first

engagement means for a microscope stage drive mechanism at a first location on said stage, and

a second engagement means for said microscope stage drive mechanism at a second location on

said stage.

9. (currently amended) The microscope stage assembly of Claim 8, wherein said first

location further comprises a microscope stage drive mechanism and a rack operatively arranged

to engage with said microscope stage drive mechanism, for movement of said stage in a y-axis.

10. (currently amended) The microscope stage assembly of Claim 9, comprising a stage

mounting plate for mounting said assembly to a microscope, said rack mounted to said stage

mounting plate, said microscope stage drive mechanism and said rack operatively arranged for

movement of said stage relative to said mounting plate in a y-axis.

11. (currently amended) The microscope stage assembly of Claim 8, wherein said second

location further comprises a microscope stage drive mechanism and a rack operatively arranged

to engage with said microscope stage drive mechanism.

12. (currently amended) The microscope stage assembly of Claim 11, comprising a stage

mounting plate for mounting said assembly to a microscope, said rack mounted to said stage

mounting plate, said microscope stage drive mechanism and said rack operatively arranged for

movement of said stage relative to said mounting plate in a y-axis.

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13. (currently amended) The microscope stage assembly of Claim 10, wherein said microscope stage drive mechanism is a unitary device adapted for movement of both said carriage and specimen retainer means relative to said stage in an x-axis, and movement of said

stage relative to said stage mounting plate in a y-axis.

14. (currently amended) The microscope stage assembly of Claim 11, wherein said microscope stage drive mechanism is a unitary device adapted for movement of both said carriage and specimen retainer means relative to said stage in an x-axis, and movement of said

stage relative to said stage mounting plate in a y-axis.

15. (currently amended) The microscope stage assembly of Claim 13, wherein said unitary microscope stage drive mechanism comprises an inner drive shaft and an outer drive shaft

arranged coaxially with respect to said inner drive shaft.

16. (currently amended) The microscope stage assembly of Claim 14, wherein said unitary microscope stage drive mechanism comprises an inner drive shaft and an outer drive shaft

arranged coaxially with respect to said inner drive shaft.

17. (withdrawn) The microscope stage assembly of Claim 1, wherein the stage further

comprises edges and/or corners which are rounded.

18. (original) A microscope comprising the stage drive assembly of Claim 1.

19. (withdrawn) A microscope comprising the stage drive assembly of Claim 2.

20. (original) A microscope comprising the stage drive assembly of Claim 3.

21. (original) A microscope comprising the stage drive assembly of Claim 4.

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- 22. (withdrawn) A microscope comprising the stage drive assembly of Claim 5.
- 23. (withdrawn) A microscope comprising the stage drive assembly of Claim 7.
- 24. (original) A microscope comprising the stage drive assembly of Claim 9.
- 25. (original) A microscope comprising the stage drive assembly of Claim 12.
- 26. (withdrawn) A microscope comprising the stage drive assembly of Claim 17.
- 27. (withdrawn) The microscope stage assembly of Claim 1, wherein said stage includes a peripheral edge and at least a portion of said peripheral edge comprises an ergonometric rim.
- 28. (withdrawn) The microscope stage assembly of Claim 27, wherein said ergonometric rim is rounded.
- 29. (withdrawn) The microscope stage assembly of Claim 1, wherein said stage comprises at least one rounded corner.
- 30. (withdrawn) The microscope stage assembly of Claim 28, wherein said ergonometric rim further comprises a rounded corner.
- 31. (withdrawn) A microscope comprising the microscope stage assembly of Claim 27.
- 32. (withdrawn) A microscope comprising the microscope stage assembly of Claim 29.
- 33. (withdrawn) A microscope stage comprising an ergonometric rim.

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34. (withdrawn) The microscope stage of Claim 33, wherein said ergonometric rim comprises a rounded edge and a rounded corner.